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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,370	10/05/2001	Michael Loren Lamb	SJ09-2001-0098	4700

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INTERNATIONAL BUSINESS MACHINES CORPORATION  
5600 COTTLE ROAD, DEPT. L2PA/010  
INTELLECTUAL PROPERTY LAW  
SAN JOSE, CA 95193-0001

EXAMINER

RAY, GOPAL C

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 05/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/972,370

Applicant(s)

LAMB, MICHAEL LOREN

Examiner

Gopal C. Ray

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3,12,18 and 19 is/are rejected.  
7) ☒ Claim(s) 2,4-11 and 13-17 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on 05 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. *draftsperson.*  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-19 are presented for examination.
2. The drawings filed on 10/5/01 are objected to by the USPTO draftsman. See PTO-948 for objections to the drawings. The drawings are acceptable for examination purposes only. Formal drawings will be required when the application is allowed. Direct any inquiries concerning drawing review by the USPTO draftsman to the Drawing Review Branch at (703) 305-8404.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. Claims 1, 12, and 14-18 are objected to because of the following informalities: the phrase "a said" in claim 1, line 9 and claim 12, line 10 should be changed to --said--; "plug-n-play" in claim 12, line 3; claim 14, line 1; claim 15, line 2; claim 16, line 3; claim 17, line 3; claim 18, line 3 should be changed to --plug-and play-- and "processors" in claim 12, line 2 should be changed to --processor--. The examiner notes the above ambiguities. However, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.
5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,119,131 issued to Cabrera et al. in view of US Patent 5,325,526 issued to Cameron et al.

As per claim 1, the claim recites an improvement. Therefore, "a digital processor in communication with one or more storage devices and a plug-and play manager that generates in response to a change in status of at least one of the storage devices" are known in the art at the time of the invention. The reference of Cabrera et al. teaches the improvement, i.e., "one or more processes executing on the digital data processor, the one or more processes referencing at least one of the storage device using a previously assigned logical identification" in Fig. 4; col. 2, lines 36-41 and col. 3, lines 4-9 and "at least a selected one of the processes responding to a said event generated by the plug-and-play by effecting querying for information the storage device, or an interface thereto, with respect to which the event was generated, and generating from that information the logical identification for that storage device" in Fig. 4; col. 3, lines 4-9 and col. 13, lines 18-64.

The reference of Cabrera et al. fails to expressly teach a plurality of processes. However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Cameron et al. The reference of Cameron et al. teaches the feature in col. 2, lines 29-47. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the above in the system of Cabrera et al in order to achieve a high degree of utilization of the resources. The reference of Cameron et al teaches the motivation in col. 2, lines 29-32.

As per claim 3, the reference of Cabrera et al. teaches "wherein the event signifies any of coupling or decoupling of the storage device ..." in col. 20, lines 7-12.

7. Claims 12, 18 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,119,131 issued to Cabrera et al. in view of the article "Deriving Unique Names in Distributed Storage Management Environments", IBM Technical Disclosure Bulletin, Vol. 1, No. 05, May 1993.

As per claim 12, the reference of Cabrera et al. teaches "at least one digital data processors in communication with one or more storage devices each having a physical identifier, the digital data processor having a plug-and play manager that generates an event in response to a change in status of at least one of the storage devices, the event referencing a physical identifier of that storage device" in Fig. 1, element 21; Fig. 4, element 403 and col. 5, lines 57-62; "a manager in communication with the digital data processors, the manager assigns a logical identifier for each of the storage devices" in Fig. 4; col. 2, lines 36-41 and col. 3, lines 4-9; "an agent on the digital data processor in communication with the manager to receive the logical identifiers" in Fig. 2A; col. 3, lines 4-9 and col. 7, lines 34-58 and "a process executing on the digital data processor that responds to a said event generated by the plug-and-play manager to effect querying the storage device having the physical address associated with the event, or an interface to that storage device, for information regarding the logical identifier of that storage" in col. 11, lines 50-60.

The reference of Cabrera et al fails to expressly teach a "storage area network (SAN)". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by the article "Deriving Unique Names in Distributed Storage Management Environments", IBM Technical Disclosure Bulletin, Vol. 1, No. 05, May 1993. The above reference teaches the feature in Fig. 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made

to implement the above feature in the system of Cabrera et al. in order to achieve a high degree of utilization of resources which is desirable in all computer systems.

As per claim 18, the claim recites a method for obtaining a logical address of a storage device in a storage area network (SAN). The reference of Cabrera et al. teaches "parsing the data contained in the object referenced by the event to determine the physical address of the storage device with respect to which the event was generated and effecting a query of any of the storage device having the physical address, and an interface thereto, for information regarding the logical identifier of that storage device" in Fig. 2A and col.8, lines 11-39.

The reference of Cabrera et al fails to expressly teach a "storage area network (SAN)". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by the article "Deriving Unique Names in Distributed Storage Management Environments", IBM Technical Disclosure Bulletin, Vol. 1, No. 05, May 1993. The above reference teaches the feature in Fig. 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the above feature in the system of Cabrera et al in order to achieve a high degree of utilization of resources which is desirable in all computer systems.

As per claim 19, the claim is rejected for the same reasons as discussed in the rejection of claim 3.

8. Dependent claims 2, 4-11 and 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claims are allowable because they recite additional limitations in addition to the limitations of the respective parent claims such as "the selected process references the physical identification in effecting querying of the storage device or an interface thereto" (claim 2)

etc. which the prior art on record does not teach or fairly suggests. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. The prior art submitted by applicant has been considered by the examiner and made of record in the file. If applicant is aware of any better prior art than those are cited, he is required to bring the prior art to the attention of the examiner.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[mark.rinehart@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

*Gopal C. Ray*  
**GOPAL C. RAY  
PRIMARY EXAMINER  
GROUP 2300**